

IN THE CLAIMS:

Please amend claims 1, 2, 5, and 7 as follows:

1. (CURRENTLY AMENDED) A thermally sprayed article comprising:
an article substrate;
an inner layer formed thermally sprayed on said article substrate of a metal material having a first predetermined thickness; and
an outer layer formed flame sprayed on said inner layer of a composite made of a polymer and the metal material having a second predetermined thickness.

2. (CURRENTLY AMENDED) A thermally sprayed article comprising:
an article substrate;
an inner layer formed thermally sprayed on said article substrate of a metal material having a first predetermined thickness; and
an outer layer formed flame sprayed on said inner layer of a composite made of a polymer and the metal material having a second predetermined thickness, wherein said second predetermined thickness is less than said first predetermined thickness.

5. (CURRENTLY AMENDED) A thermally sprayed article comprising:
an article substrate;
an inner layer formed thermally sprayed on said article substrate of a metal material; and

an outer layer formed flame sprayed on said inner layer of a composite made of a polymer and the metal material co-deposited to form said outer layer, wherein said outer layer has a hardness less than said inner layer.

7. (CURRENTLY AMENDED) A thermally sprayed article comprising:
an article substrate;
an inner layer formed thermally sprayed on said article substrate of a metal material having a first predetermined thickness; and
an outer layer formed flame sprayed on said inner layer of a composite made of a polymer and the metal material co-deposited to form said outer layer and having a second predetermined thickness less than said first predetermined thickness, said outer layer having a hardness less than said inner layer.

Once the inner layer 12 is formed, the method includes the step of co-depositing a polymer and the metal material against the inner layer 12 as illustrated in FIG. 4. During the final stages of thermal spraying, 5 such step is desirably carried out using a flame spray gun 20 and a polymer, preferably a low cost stable thermoplastic polymer. The method includes the step of forming the outer layer 14 to a second predetermined thickness as the metal material from the thermal spray gun 18 and the polymer from the flame spray gun 20 are applied and built up on the inner layer 12 as illustrated 10 in FIG. 5. It should be appreciated that flame spraying is conventional and known in the art.

The completed thermally sprayed article 10 will 15 have the required bulk structure or inner layer 12 and properties with a soft and continuous outer layer 14 that can be easily machined. FIG. 6A shows the types of chips produced during lathe machining for conventional thermally sprayed articles and FIG. 6B shows the types of 20 chips produced during lathe machining for the thermally sprayed articles 10. The machined chips of FIG. 6B are long and curled as compared to the machined chips of FIG. 6A. The machined chips of FIG. 6B are produced with conventional carbide machining tools whereas the machined 25 chips of FIG. 6A are produced with conventional diamond